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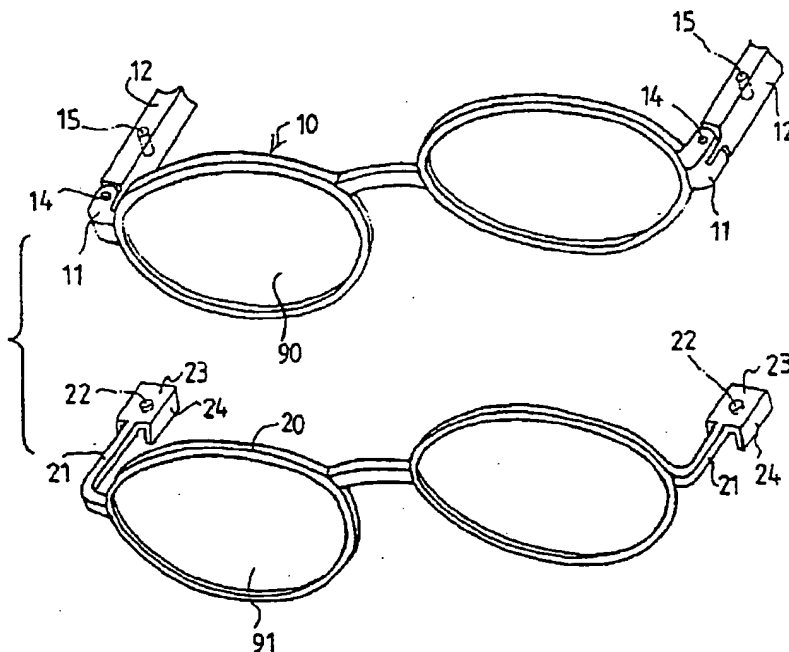
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(54) Title: EYEGLASS APPLIANCE HAVING AUXILIARY FRAME



(57) Abrégé/Abstract:

An eyeglass appliance includes a primary frame having two side studs for pivotally coupling two legs thereto. An auxiliary frame for disposing in front of the primary frame includes two sides each having an extension for overlying the stud and the leg. Each of the extensions may include a magnet for engaging with another magnet mounted in the adjacent leg or with a magnetic leg and for securing the auxiliary frame to the primary frame. Each of the extensions may include a clamping member for securing to the legs without the use of magnets.

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ABSTRACT OF THE DISCLOSURE

An eyeglass appliance includes a primary frame having two side studs for pivotally coupling two legs thereto. An auxiliary frame for disposing in front of the primary frame includes two sides each having an extension for overlying the stud and the leg. Each of the extensions may include a magnet for engaging with another magnet mounted in the adjacent leg or with a magnetic leg and for securing the auxiliary frame to the primary frame. Each of the extensions may include a clamping member for securing to the legs without the use of magnets.

TITLE: EYEGLASS APPLIANCE HAVING AUXILIARY FRAME**BACKGROUND OF THE INVENTION****1. Field of the Invention**

5 The present invention relates to a pair of eyeglasses, and more particularly to a pair of eyeglasses having an auxiliary frame for supporting auxiliary lenses.

2. Description of the Prior Art

The closest prior art of which applicant is aware is US Patent 5,568,207 to Chao and has been assigned to the present assignee. The auxiliary frame may not be engaged with the legs.

10 The present invention has arisen to provide a novel configuration for securing the auxiliary frame to the primary frame.

SUMMARY OF THE INVENTION

15 The primary objective of the present invention is to provide an eyeglass appliance in which each of the legs of the primary frame includes a magnet for engaging with a clamping member and/or a magnet of the auxiliary frame for solidly and stably securing the auxiliary frame to the primary frame.

20 In accordance with one aspect of the invention, there is provided an eyeglass appliance comprising a primary frame including two sides each having a stud, two legs each pivotally coupled to a respective one of the studs, an auxiliary frame for disposing in front of the primary frame, the auxiliary frame including two sides each having an extension for overlying the adjacent stud and a portion of the adjacent leg, each of the extensions including a free end portion, and a pair of clamping members, each secured to the free end portion of a corresponding one of the extensions for clamping to one of the legs and for securing the auxiliary frame to the primary frame.

25 The legs may be made of magnetic material, with there being magnets mounted in the extensions for engaging with the legs and for helping to secure the auxiliary frame to the primary frame.

Each of the clamping members includes two flaps extended downward for engaging with and for clamping to the leg.

Each of the clamping members may include a biasing means for engaging with the adjacent leg and for securing to the leg. Such biasing means may include a spring member within the clamping

member and having at least one bulge for engaging with the leg and for securing to the leg.

There may be two first magnets mounted in the legs and two corresponding magnets mounted in the extensions for engaging with the first magnets and for securing the auxiliary frame to the primary frame.

5 Further objectives and advantages of the present invention will become apparent from a careful reading of a detailed description provided hereinbelow, with appropriate reference to accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

10 FIG. 1 is an exploded view of an eyeglass appliance having an auxiliary frame in accordance with the present invention;

FIG. 2 is a perspective view of the eyeglass appliance; and

FIGS. 3 and 4 are cross-sectional views taken along lines 3-3, 4-4 of FIG. 2 respectively.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

15 Referring to the drawings, and initially to FIGS. 1 -3, an eyeglass appliance in accordance with the present invention comprises a primary frame 10 for supporting primary lenses 90, which frame includes two studs 11 formed in the side portions. Each of two legs 12 is pivotally coupled to a respective stud 11 at a pivot shaft 14 and each leg includes a magnet 15 secured or mounted close to the pivot shaft 14. Preferably, the magnets 15 are facing upward. An auxiliary frame 20 for supporting auxiliary lenses 91 and for disposing in front of the primary frame includes two extensions
20 21 extended rearward from the side portions for overlying the corresponding studs 11 and a portion of the corresponding leg 12 of the primary frame 10. Each of the extensions 21 mounts a magnet 22 for engaging with the magnet 15 of the leg 12 and for securing the auxiliary frame 20 to the primary frame 10.

25 It is preferable that each of the extensions 21 includes a clamping member 23 provided at the free end portion thereof and having a pair of downward dependent flaps 24 for resiliently engaging with side portions of the leg 12 and for further stably securing the auxiliary frame 20 to the primary frame 10.

Alternatively, when the legs 12 are made of magnetic material, such as metal, the magnets 22 may also engage directly with the legs 12 for securing the auxiliary frame to the primary frame

without use of magnets 15.

Alternatively, without the magnets 22, 15, the flaps 24 of the clamping members 23 of the extensions 21 may solidly engage with the legs 12 for solidly securing the auxiliary frame to the primary frame without the use of magnets 15.

5 As shown in FIG. 4, it is preferable that each of the clamping members 23 further includes a spring member 26 having one or more bulges 27 for engaging with and biasing against the adjacent leg 12 and for further solidly securing the clamping member to the leg 12. Each of the flaps 24 includes a flange 28 extended laterally inward for engaging with the spring member 26 and for preventing the spring member 26 from disengaging from the clamping member 23.

10 Accordingly, in one embodiment, the eyeglass appliance in accordance with the present invention includes a primary frame having two magnets mounted in the legs for engaging with magnets of the auxiliary frame and for solidly and stably securing the auxiliary frame to the primary frame. The extensions of the auxiliary frame may each include a clamping member for solidly securing the auxiliary frame to the primary frame without the use of magnets.

15 Although this invention has been described with a certain degree of particularity, it is to be understood that the present disclosure has been made by way of example only and that numerous changes in the detailed construction and the combination and arrangement of parts may be resorted to without departing from the spirit and scope of the invention as hereinafter claimed.

CLAIMS

1. An eyeglass appliance comprising:

a primary frame including two sides each having a stud;

two legs each pivotally coupled to a respective one of the studs;

5 an auxiliary frame for disposing in front of said primary frame, said auxiliary frame including two sides each having an extension for overlying said respective stud and a portion of the corresponding leg, each of said extensions including a free end portion; and

a pair of clamping members, each secured to the free end portion of a corresponding one of said extensions for clamping to one of said legs and for securing said auxiliary frame to said primary
10 frame.

2. An eyeglass appliance according to claim 1, wherein said legs are made of magnetic material, there being a magnet mounted in each of said extensions for engaging with said adjacent leg and for securing said auxiliary frame to said primary frame.

3. An eyeglass appliance according to claim 1, wherein each of said clamping members includes
15 two flaps extended downward for engaging with and for clamping to said leg.

4. An eyeglass appliance according to claim 1, wherein each of said clamping members includes a biasing means for engaging with said legs and for securing to said legs.

5. An eyeglass appliance according to claim 4, wherein said biasing means includes a spring
20 member engaged in said clamping member and having at least one bulge for engaging with said leg and for securing to said leg.

6. An eyeglass appliance according to claim 1 comprising two first magnets mounted in said legs and two second magnets mounted in said extensions for engaging with said first magnets and for securing said auxiliary frame to said primary frame.

